said [the] crosslinking agent is selected from the group consisting of triazine derivatives and [or] carbamoyl derivatives.

10. (Amended). A recording sheet according to claim 4 wherein said [the] crosslinking agent is hydroxy-dichloro-1,3,5-triazine or 2-(4-dimethylcarbamoyl-pyridino)-ethane-sulfonic acid.

REMARKS

Reconsideration of the rejection contained in the Office Action of August 6, 1999 is respectfully requested.

All pending claims, namely 1-11, stand rejected under various § 112 grounds as being indefinite. Claims 1, 4, 8 and 11 stand rejected under § 102(b) as being anticipated by U.S. Patent No. 5,281,307 to Smigo et al. and claims 2, 3, 6 and 7 stand rejected under § 103 as being unpatentable over Smigo et al. Claim 5 is rejected under § 102(b) as anticipated by or, in the alternative, under § 103 as obvious over Smigo et al. in view of U.S. Patent No. 5,270,103 to Oliver et al. Claims 1-11 also stand rejected under § 103 as unpatentable over Smigo et al. and in particular claims 9 and 10 are rejected as unpatentable over Smigo et al. further in view of Kobayashi et al. Finally, Claims 1-11 stand rejected under § 103 as being unpatentable over either Kono et al. or Kashiwazaki et al. in view of Smigo et al.

Claims 1 to 10 have been amended to clarify the claims and to overcome the Examiners § 112 rejections in ¶ 1 of the Office action.

In ¶ 3 of the Action, claims 1, 4, 8 and 11 stand rejected as being anticipated by U.S. Patent No. 5,281,307 to Smigo et al.

It is axiomatic that "[f]or a prior art reference to anticipate in terms of 35 USC § 102, every element of the claimed invention must be identically shown in a single reference." In re Bond, 910 F.2d 831, 832, 15 USPQ 1566, 1567 (Fed.Cir. 1990).

Examiner acknowledges that Smigo does not teach or disclose "recording sheets for ink jet printing" nor coating layers

"receptive for aqueous inks". However, she states that Smigo's prior art coating of crosslinked polyvinyl alcohol/vinyl amine copolymer anticipate the present invention claims. Applicants respectfully disagree.

The present invention provides receiving sheets for ink jet printing comprising at least one binder, a crosslinking agent and a copolymer of vinyl alcohol and vinylamine. Claim 1 has been amended to particularly define the recording sheet as comprising "a support coated with at least one layer receptive for aqueous inks" where the layer contains a polyvinyl alcohol/vinyl amine copolymer resulting in a recording sheet with "improved light fastness".

Smigo et al. discloses coated paper with a polyvinyl alcohol/vinyl amine copolymer in "dry end addition" to cellulosic materials to improve dry strength, wet strength and fold resistance. There is no mention in Smigo et al. that the property of light fastness would be improved by the addition of the copolymer.

Examiners rejection of Claim 5 as being anticipated by Smigo in view of Oliver is deemed moot in view of the amendments made to claim 1. In addition, the § 102(b) rejection combining the Smigo and Oliver references is improper since "every element of the claimed invention must be identically shown in a single reference".

As now provided by the amended claims, the invention as now defined is distinct from Smigo. Applicant's request withdrawal of the Examiners rejections under § 102(b).

In ¶ 5, claims 1-11 stand rejected under § 103 as being unpatentable over Smigo et al. Applicants respectfully disagree.

As mentioned, Smigo et al. discloses paper coated with a polyvinyl alcohol/vinyl amine copolymer added in "dry end" addition to cellulosic materials. This addition is done during (at the end) paper manufacturing. In contrast, the claimed invention is used with RC-papers or sheets made from synthetic materials (polyester film - examples 3, 4, 5, 6, 8, 9 and 10). **The invention coatings are applied in a separate step to the supports.**

Smigo et al. teaches using the copolymers to coat paper and paper-type products in order to provide improvements in properties such as dry strength, wet strength and fold resistance. There is no suggestion that the property of light fastness would be improved by the addition of the copolymer.

Claims 9 and 10 have been rejected as being unpatentable over Smigo in view of Kobayashi et al. The Examiner has cited Kobayashi et al. for disclosing use of various crosslinking agents for crosslinking water-soluble resins such as polyvinyl alcohol. Applicant's respectfully disagree.

Kobayashi et al. does disclose different crosslinking agents for ink receiving layers, however, none to the examples of the water-soluble resins include "cationically modified polyvinyl alcohol or gelatin" as used in the present invention.

It is well-settled that the mere fact that the prior art could be modified to form the invention would not make that modification obvious unless the prior art suggested the desirability of the modification. In re Laskowski, 10 U.S.P.Q. 2d 1397, 1398 (Fed. Cir. 1989); In re Gordon, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed Cir. 1984). It is submitted that the cited art does not teach or suggest the desirability of modifying the coated paper of Smigo et al. to incorporate the secondary reference teaching of crosslinking agents. Since the crosslinking agents disclosed in Kobayashi do not teach crosslinking layers where only a small part of the layer consists of the copolymer of poly(vinylalcohol/ vinylamine).

Claims 1-11 stand rejected under § 103 as being unpatentable over Kono et al. or Kashiwazaki et al. in view of Smigo et al. The Examiner states that Kono et al. and Kashiwazaki et al. disclose recording media for ink jet printing comprising a support and at least one ink-receptive layer and further states that both patents teach the use of cationically modified polyvinyl alcohol in an ink-receptive layer.

The Examiner acknowledges that neither Kono et al. nor

Kashiwazaki et al. explicitly disclose a copolymer of the general structure set forth in claim 1 but states that the defined copolymer is within the scope of each patent's cationically modified polyvinyl alcohol. Further, the Examiner argues that it would have been obvious to use the copolymers disclosed by Smigo et al. as the cationically modified polyvinyl alcohol used in the recording medium of Kono et al. or Kashiwazaki et al. Applicant's respectfully disagree.

Kono et al. indicates that the amount of supplementary binder (Polymer A) in the cationically modified product of polyvinyl alcohol is an important factor. The best result is obtained when Polymer A is used in an amount of not less than 1 part by weight and not more than 33 parts by weight of the cationically modified polvinyl alcohol (see Col. 6 lines 16-35). Therefore at least two thirds of the layer of Kono et al. consist of the cationically modified product of polyvinyl alcohol. In the present invention, which uses a different copolymer that the Examiner acknowledges is not used in Kono, the amount of copolymer in the coating layer is much less while providing improved light fastness (see Applicant's examples).

Kashiwazaki et al. does not mention that the cationically modified polyvinyl alcohol would increase light fastness of the recording medium. The layers in Kashiwazaki et al. consist essentially of the cationically modified polyvinyl alcohol, an aqueous resin emulsion and inorganic fine particles. The solids content of these aqueous resin emulsions (supplementary binder) is preferably with the range of from 0.1 to 30% by weight based on the content of the cationically modified polyvinyl alcohol. If the content exceeds 50% by weight the ink receptivity of the resulting ink-receiving layer is rapidly lowered, giving rise to image problems.

It is well-settled that the mere fact that the prior art could be modified to form the invention would not make that modification obvious unless the prior art suggested the desirability of the

modification. In re Laskowski, 10 U.S.P.Q. 2d 1397, 1398 (Fed. Cir. 1989); In re Gordon, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed Cir. 1984). It is submitted that the cited art does not teach or suggest the desirability of modifying the recording sheets of Kono et al. or Kashiwazaki et al. to incorporate the copolymer taught in Smigo et al. As illustrated in the examples of the invention, the recording sheets the relatively small additions of the copolymer of poly(vinylalcohol/vinylamine) in the coated layer lead to a dramatic improvement in light fastness.

Finally in ¶ 9 the Examiner states that Document 21 (EP 0445327 A1) listed on page 1 of 2 of the PTO-1449 filed 6/10/99 "has not been considered because the document is not in the English language and no statement of relevance for the document was included in the IDS." Applicants direct the Examiners attention to the specification at page 5 line 22 where this reference is described as "receiving layers with good image quality on polyolefin coated paper." Also for the Examiners review Applicant has included a translation of the Abstract for EP 0445 327 A1.

In view of the foregoing, Applicant submits that this application is now in condition for allowance. No new matter has been introduced by this Amendment. Reconsideration of this application and allowance of Claims 1-11 are hereby requested. If a telephone interview would be useful to advance this case, then the Examiner is invited to telephone the undersigned.

Respectfully submitted,

OSTRAGER CHONG FLAHERTY
& ONOFRIO
Attorneys for Applicant

By: _____
Dara L. Onofrio
Reg. No. 34,889
300 Park Avenue
New York, N.Y. 10022
(212) 826-6565